

REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-7 are presently pending in this case.

In the outstanding Official Action, Claims 1-7 were rejected under 35 U.S.C. §103(a) as unpatentable over Itoh et al. (U.S. Patent Application Publication No. 20060205358, hereinafter “Itoh”) in view of Alastalo (U.S. Patent No. 6,721,302) and Takano (U.S. Patent Application Publication No. 20030148780).

Applicants and Applicants’ representatives thank Examiner Viana Di Prisco for the courtesy of the interview granted to Applicants’ representatives on July 9, 2009. During the interview, differences between the claims and Alastalo were discussed. Examiner Viana Di Prisco agreed to reconsider the rejection of record after formal submission of the present response.

The outstanding rejection is respectfully traversed.

Claim 1 recites in part:

establishing a list of available modulation schemes, each modulation scheme having an available transmission block size;
detecting a channel quality between the base station and the mobile station;
detecting the amount of data buffered in a transmission buffer of a sender; and
determining a modulation scheme to be used in the packet communications based on the channel quality and the buffered data amount, said determining including determining the modulation scheme by *selecting a modulation scheme from the list using a smallest available transmission block size that is greater than or equal to the amount of data buffered.*

Accordingly, the claimed invention always selects a modulation scheme with a transmission block size greater than or equal to the amount of data buffered. Thus, the data buffered can always be sent in a single block.

The outstanding Office Action conceded that Itoh does not disclose the above highlighted feature and cited Alastalo as describing this feature.¹ However, the cited portion of Alastalo, column 3, lines 38-43, only describes that the modulation rate can be selected to “help reduce the amount of padding.” There is no teaching or suggestion in Alastalo to select a modulation scheme from the list ***using a smallest available transmission block size that is greater than or equal to the amount of data buffered.*** In fact, Alastalo describes a method for dealing with multiple data packets in a single time slot, as described in column 2, lines 23-52 of Alastalo. In this regard, column 3, lines 18-25 of Alastalo describes that each of the packets must have the same length to properly detect acknowledgments of each packet. Thus, padding is only needed in the last packet to match this packet’s length to the earlier packets. Such a scheme clearly ***always*** selects a transmission block size smaller than the amount of data buffered. Otherwise multiple packets would not exist. Therefore, Alastalo not only fails to describe selecting a modulation scheme using a smallest available transmission block size that is greater than or equal to the amount of data buffered, Alastalo only describes using a smallest available transmission block size that is ***less than*** the amount of data buffered. Accordingly, it is respectfully submitted that that only does Alastalo not teach or suggest the above highlighted feature, modifying Alastalo include such a feature would make Alastalo unsuitable for its intended purpose, which is to ensure acknowledgments of multiple data packets are successfully received, as described in column 2 of Alastalo. Accordingly, there can be no suggestion or motivation to modify Alastalo to include the claimed feature.

Consequently, it is respectfully submitted that the proposed combination does not teach or suggest “determining a modulation scheme” as defined in Claim 1, and there is no suggestion or motivation to combine the cited references to create the claimed invention.

¹See the outstanding Office Action at pages 3-4.

Consequently, Claim 1 (and Claim 2 dependent therefrom) is patentable over Itoh in view of Alastalo and Takano.

Claims 3 and 5 recite in part:

a modulation scheme determination unit configured to determine a modulation scheme for the packet communications based on the channel quality and the buffered data amount in the transmission buffer, said modulation scheme determination unit configured to determine the modulation scheme by *selecting a modulation scheme from the list using a smallest available transmission block size that is greater than or equal to the amount of data buffered.*

As noted above, the proposed combination does not teach or suggest any element configured to select a modulation scheme from the list using a smallest available transmission block size that is greater than or equal to the amount of data buffered, and there is no suggestion or motivation to combine the cited references to create the claimed invention. Consequently, it is respectfully submitted that the proposed combination also does not teach or suggest “a modulation scheme determination unit” as defined in Claims 3 and 5. Consequently, Claims 3 and 5 (and Claim 4 and 6 dependent therefrom) are also patentable over Itoh in view of Alastalo and Takano.

Finally, Claim 7 recites in part:

causing the sender to determine a modulation scheme for the packet communications based on the channel quality and the data amount in the transmission buffer of the sender, said determining including determining the modulation scheme by *selecting a modulation scheme from the list using a smallest available transmission block size that is greater than or equal to the amount of data buffered.*

As noted above, the proposed combination does not teach or suggest selecting a modulation scheme from the list using a smallest available transmission block size that is greater than or equal to the amount of data buffered, and there is no suggestion or motivation to combine the cited references to create the claimed invention. Consequently, it is respectfully submitted that proposed combination does not teach or suggest “causing the

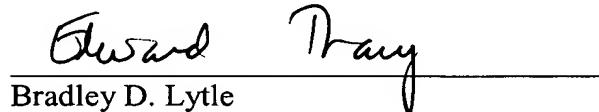
Application No. 10/736,698
Reply to Office Action of April 3, 2009

sender to determine a modulation scheme" as defined in Claim 7. Consequently, Claim 7 is also patentable over Itoh in view of Alastalo and Takano.

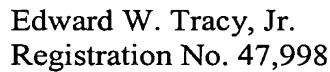
Accordingly, the pending claims are believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Bradley D. Lytle
Attorney of Record
Registration No. 40,073


Edward W. Tracy, Jr.
Registration No. 47,998

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)